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On the Birds collected during the "Skeat Expedition" to the Malay Peninsula, 1899-1900. By J. L. Bonhote, B.A.

In writing an account of the Birds collected by the "Skeat Expedition" in 1899, it is unnecessary to dwell on the geographical positions of the places mentioned, as they have already been fully dealt with in my former paper on the Mammals. Although among the 139 species of which examples were collected none are new to science, yet there are several of considerable rarity; it is worthy of notice that the eastern side produced nothing very striking or even scarce, and most of the interesting forms were procured by Mr. Laidlaw on Mt. Gunong Inas, in Perak, a locality which had previously been visited on various occasions, viz., in 1886, 1887, and 1888 by Mr. Wray, in 1889 by Mr. Hartert, and again quite recently by Mr. A. L. Butler.

Mr. Laidlaw was, however, successful in procuring examples of several species which, so far as I am aware, are known only from the specimens originally procured by Mr. Wray. Chief among these is a fine male example of Chrysophlegma wrayi, which has hitherto been known only by a single specimen, a female; among the rest may be mentioned Pericrocotus croceus (a doubtful species, possibly only a variety of P. wrayi), Corythocichla leucosticta, Pteruthius aeralutus, Heliopais personata, &c. Although the number of species is considerable, the number of individuals of the various species is somewhat restricted, so that this paper is more of the form of a mere list than I would wish it to be.

1. Spilornis cheela (Lath.).

Falco cheela, Lath. Ind. Ornith. i. p. 14 (1790). Spilornis cheela (Lath.), Sharpe, Cat. Bds. Brit. Mus. i. p. 287 (1874); Oates, Bds. Brit. Burm. ii. p. 193 (1883).

a. Ad. sk. Patelung. 28th April, 1899.
b. c. Bukit Besar, Jalor. 6th May, 1899.
c-e. c. Biserat, Jalor. 13th May, 1899.
f. c. Kota Bharu, Kelantan. 9th July, 1899.

2. Spizaetus caligatus (Hume).

Limnaetus caligatus, Hume, Str. Feathers, 1879, p. 44. Spizaetus caligatus (Hume), Sharpe, P. Z. S. 1887, p. 433. a. 3. Sungei, Kelantan. Sept. 1899.

3. Haliaetus leucogaster (Gm.).

Falco leucogaster, Gm. S. N. i. p. 257 (1788, ex Lath.).

Haliaetus leucogaster (Gm.), Sharpe, Cat. Bds. Brit. Mus. i. p. 307 (1874); Kelham, Ibis, 1881, p. 368; Oates, op. cit. ii. p. 199.

a. J. Tringganu. 31st Oct., 1899.b. Kedah. 3rd May, 1900.

4. Haliastur indus (Bodd.).

Falco indus, Bodd. Tab. Pl. Enl. 25 (1783).

Haliastur indus (Bodd.), Sharpe, Cat. Bds. Brit. Mus. i. p. 313 (1874); Kelham, loc. cit. p. 368; Oates, op. cit. ii. p. 201; Hartert, Journ. für Ornith. 1889, p. 379.

a, b. of ♀. Bankok, Patelung. 6th April, 1899.

c. d. Biserat, Jalor. 12th May, 1899. d. d. Sungei, Kelantan. Sept. 1899.

e. Arrah Bukit, Kedah. 5th May, 1900.

f, g. Pull. Tale Nawry, Patelung. April 1899.

h. No particulars.

5. MICROHIERAX FRINGILLARIUS (Drap.).

Falco fringillarius, Drap. Dict. Class. d'Hist. Nat. vi. p. 412,

pl. v. (1824).

Microhierax fringillarius (Drap.), Sharpe, Cat. Bds. Brit. Mus. i. p. 367 (1874); Kelham, loc. cit. p. 364; Oates, op. cit. ii. p. 212.

a, b. ♂♀. Aring, Kelantan. 2nd Sept., 1899.

6. Polioaetus ichthyaetus (Horsf.).

Falco ichthyaetus, Horsf. Tr. Linn. Soc. xiii. p. 136 (1822). Polioaetus ichthyaetus (Horsf.), Sharpe, Cat. Bds. Brit. Mus. i. p. 452 (1874); Kelham, loc. cit. p. 367.

a. Tringganu. 15th July, 1899.

b. No particulars.

7. SYRNIUM SINENSE (Lath.).

Strix sinensis, Lath. Gen. Syn. Suppl. pl. ii. Add. p. 368. Syrnium sinense, Sharpe, Cat. Bds. Brit. Mus. ii. p. 261 (1875); Oates, op. cit. ii. p. 164.

a. ♀. Bukit Besar, Jalor. 6th May, 1899.

8. Ketupa Javensis Less.

Ketupa javensis, Less. Traité, p. 14; Sharpe, Cat. Bds. Brit. Mus. ii. p. 8 (1875); Kelham, loc. cit. p. 369; Oates, op. cit. ii. p. 149.

a. Q. Bukit Besar, Jalor. 8th May, 1899.

b. Q. Biserat, Jalor. 14th May, 1899.

9. CORONE ENCA (Horsf.).

Fregilus enca, Horsf. Tr. Linn. Soc. xiii. p. 164 (1822).

Corone enca (Horsf.), Sharpe, Cat. Bds. Brit. Mus. iii. p. 43 (1877); Kelham, loc. cit. p. 518.

a. Q. Bukit Besa, Jalor. 8th May, 1899.

b. d. Pulan, Bidang. 6th Dec., 1899.

c. No particulars.

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10. PLATYSMURUS LEUCOPTERUS (Temm.).

Glaucopis leucopterus, Temm. Pl. Col. 265.

Platysmurus leucopterus (Temm.), Sharpe, Cat. Bds. Brit. Mus. iii. p. 90 (1877); Kelham, loc. cit. p. 519; Oates, op. cit. i. p. 409; Hartert, Journ. für Ornith. 1889, p. 391.

a. ♀. Aring, Kelantan. 12th Sept., 1899.

11. Oriolus consanguineus (Wardl.-Rams.).

Analcipus consanguineus, Wardl.-Rams. Ibis, 1881, p. 32, pl. i. Oriolus consanguineus (W.-Rams.), Sharpe, P. Z. S. 1887, p. 434; Hartert, loc. cit. p. 389.

a. d. Gunong Inas, 3500 ft., Perak.
b. d. Gunong Inas, 4000 ft., Perak.
12th Dec., 1899.
12th Dec., 1899.

Feet, bill, and iris slaty black.

12. DICRURUS ANNECTENS (Hodgs.).

Buchanga annectens, Hodgs. Ind. Rev. i. p. 326.

Dicrurus annectens (Hodgs.), Sharpe, Cat. Bds. Brit. Mus. iii. p. 231 (1877); Oates, op. cit. p. 217.

a. d. Pulau Bidang. 7th Dec., 1899.

b. Kedah. May 1900.

13. BHRINGA REMIFER (Temm.).

Edolius remifer, Temm. Pl. Col. iii. p. 178.

Bhringa remifer (Temm.), Sharpe, Cat. Bds. Brit. Mus. iii. p. 257 (1877); Oates, op. cit. i. p. 224; Sharpe, P. Z. S. 1887, p. 434.

a, b. ♂♀. Gunong Inas, 4000 ft., Perak. Dec. 1899.

c. No particulars.

Feet black; iris dark brown.

14. Dissemurus paradiseus (Bp.).

Edolius paradiseus, Bp. Consp. i. p. 351.

Dissemurus paradiseus (Bp.), Sharpe, Cat. Bds. Brit. Mus. iii. p. 259 (1877); Oates, op. cit. i. p. 225; Hartert, loc. cit. p. 389.

Dissemurus platurus (Vieill.), Kelham, loc. cit. p. 507.

a. Q. Nawry Chik, Patelung. 28th April, 1899.

b, c. Q. Blembing, Legeh. July 1899.

d-f. ♂♂♀. Aring, Kelantan. August 1899.

15. Artamides sumatrensis (S. Müll.).

Ceblepyris sumatrensis, S. Müll. Verh. Nat. Ges. Land- en Volkenk. p. 190 (nec Gm.).

Artamides sumatrensis (S. Müll.), Sharpe, Cat. Bds. Brit. Mus.

iv. p. 12 (1879).

Graucalus sumatrensis (S. Müll.), Kelham, loc. cit. p. 501.

a. d. Gunong Inas, Perak. 7th Dec., 1899.

Feet dark; iris brown.

16. Pericrocotus croceus Sharpe.

Pericrocotus croceus, Sharpe, P. Z. S. 1888, p. 269.

a. d. Gunong Inas, 4000 ft., Perak. 14th Dec., 1899.

Bill and feet black; eyes hazel.

This specimen is, I believe, the only one collected since the species was described from an isolated specimen procured by Mr. Wray near this same locality. It differs slightly from the type in having the cheeks dark grey, i. e. lighter than the crown, and in the throat being golden buff fading to white at the base of the bill, instead of dark slate-grey. As the type of croceus, however, shows signs both of the yellow on the throat and also of the grey on the cheeks, these differences are probably due to age.

Dr. Sharpe, in describing the species, suggests that it may be merely a yellow variety of *P. wrayi*, but more material is necessary before the matter can be definitely settled. I have carefully examined the series of *P. wrayi* at the British Museum; and those males that are still in their immature yellow dress or in process of assuming the red plumage are easily to be distinguished by the

following characters :-

(i.) In P. wrayi of there is always a slight trace of red visible somewhere, which is not the case in P. croceus.

(ii.) In *P. croceus* the colour of the back is as deep and glossy as in specimens of *P. wrayi* in full red plumage; *P. wrayi* in yellow

plumage is always duller on the back.

(iii.) In *P. wrayi* in yellow plumage the yellow does not extend over the throat to the base of the bill, but it has those parts of a dirty white which are afterwards to be black; in *P. croceus* the intensity of the yellow is not diminished.

17. Rhipidura Javanica (Sparrm.).

Muscicapa javanica, Sparrm. Mus. Carls. iii. pl. 75.

Rhipidura javanica (Sparrm.), Sharpe, Cat. Bds. Brit. Mus. iv. p. 332 (1879); Oates, op. cit. i. p. 267; Hartert, loc. cit. p. 389.

a. Tringganu. 29th Oct., 1899.

Iris brown; bill and feet black.

[Local name "murai gila" (= mad murai), so called from its alleged eccentricity of flight.— $R.\ E.$]

18. Terpsiphone affinis (Blyth).

Tchitrea affinis, Blyth, J. A. S. B. xv. p. 292 (ex A. Hay MS.). Terpsiphone affinis (Blyth), Sharpe, Cat. Bds. Brit. Mus. iv. p. 349 (1879); Oates, op. cit. i. p. 261; Sharpe, P. Z. S. 1888, p. 270.

a. ♀. Aring, Kelantan. 1st Sept., 1899.

Bill and feet blue-black.

19. SIPHIA RUBECULOIDES (Vigors).

Phænicura rubeculoides, Vigors, P. Z. S. 1831, p. 35.

Siphia rubeculoides, Sharpe, Cat. Bds. Brit. Mus. iv. p. 445 (1879); Oates, op. cit. i. p. 287.

a. d. Aring, Kelantan. 28th August, 1899.

20. ÆGITHINA TIPHIA (L.).

Motacilla tiphia, Linn. S. N. i. p. 331 (ex Edwards).

Egithina tiphia (L.), Sharpe, Cat. Bds. Brit. Mus. vi. p. 7 (1881); Oates, op. cit. i. p. 202.

a-c. ♂. Biserat, Jalor. 15th May, 1899. d, e. ♀. Biserat, Jalor. 15th May, 1899.

f. Pull. Biserat, Jalor. 13th May, 1899.

21. Hemixus cinereus (Blyth).

Iole cinerea, Blyth, J. A. S. B. xiv. p. 573 (ex Hay MS.).

Hemixus cinereus (Blyth), Sharpe, Cat. Bds. Brit. Mus. vi. p. 52 (1881); Hartert, loc. cit. p. 388.

a-c. ♂♀♀. Gunong Inas, Perak. Dec. 1899.

22. lole tickelli (Blyth).

Hypsipetes tickelli, Blyth, J. A. S. B. xxiv. p. 275.

Ide tickelli (Blyth), Sharpe, Cat. Bds. Brit. Mus. vi. p. 60 (1881); Oates, op. cit. i. p. 179; Sharpe, P. Z. S. 1887, p. 436; Hartert, loc. cit. p. 388.

Tole tickelli peracensis, Hartert et Butler, Nov. Zool. v. p. 506.

a, b. ♂♀. Gunong Inas, 4000 ft., Perak. Dec. 1899.

lole tick. peracensis, of which these specimens are practically topotypes, is distinguished by the crown being darker and less rufous, ear-coverts more dingy grey, and the breast and flanks more ashy.

23. Criniger Phæocephalus (Hartl.).

Ixos phæocephalus, Hartl. Rev. Zool. 1844, p. 401.

Criniger phaocephalus (Hartl.), Sharpe, Cat. Bds. Brit. Mus. vi. p. 74 (1881); Oates, op. cit. i. p. 183.

a. ♀. Perak. 26th Dec., 1899.

Feet pink; bill and iris brown.

24. Criniger gutturalis (Bp.).

Trichophorus gutturalis, Bp. Consp. i. p. 262 (ex Müll. MS. in Mus. Leyd.).

Criniger gutturalis (Bp.), Sharpe, Cat. Bds. Brit. Mus. vi. p. 80 (1881); Oates, op. cit. i. p. 185.

a. No particulars.

25. TRICHOLESTES CRINIGER (Blyth).

Brachypodius criniger, Blyth, J. A. S. B. xiv. p. 577 (ex A. Hay MS.)

Tricholestes criniger (Blyth), Sharpe, Cat. Bds. Brit. Mus. vi. p. 89 (1881); Oates, op. cit. i. p. 186.

a. d. Aring, Kelantan. 2nd Sept., 1899.

Bill blue-black; feet dirty yellow.

26. Trachycomus ochrocephalus (Gm.).

Turdus ochrocephalus, Gm. Syst. Nat. i. p. 821 (ev Browne). Trachycomus ochrocephalus (Gm.); Sharpe, Cat. Bds. Brit. Mus. vi. p. 93 (1881); Oates, op. cit. i. p. 188; Sharpe, P. Z. S. 1888, p. 272.

a. Blembing, Legeh. 27th July, 1899.

b, c. \(\mathhcap{2}\). Aring, Kelantan. 6th Sept., 1899.

27. Pycnonotus analis (Horsf.).

Turdus analis, Horsf. Tr. Linn. Soc. xiii. p. 147.

Pycnonotus analis (Horsf.); Sharpe, Cat. Bds. Brit. Mus. vi. p. 140 (1881); Oates, op. cit. i. p. 191; Hartert, loc. cit. p. 388.

a. d. Biserat, Jalor. 14th May, 1899.

b. ♀. Tringganu. 28th Oct., 1899.

c. d. Ulu Selama, Perak. Dec. 1899.

d. No particulars.

28. Pycnonotus findlaysoni Strick.

Pycnonotus findlaysoni, Strick. Ann. Nat. Hist. xiii. p. 411; Sharpe, Cat. Bds. Brit. Mus. vi. p. 144 (1881); Oates, op. cit. i. p. 193.

a. d. Aring, Kelantan. 2nd Sept., 1899.

b. No particulars.

29. Pycnonotus blanfordi Jerdon.

Pycnonotus blanfordi, Jerdon, Ibis, 1862, p. 20; Sharpe, Cat. Bds. Brit. Mus. vi. p. 151 (1881); Oates, op. cit. i. p. 195.

a. ♀. Biserat, Jalor. 13th May, 1899.

30. Pycnonotus simplex Less.

Pycnonotus simplex, Less. Rev. Zool. 1839, p. 167; Sharpe, Cat. Bds. Brit. Mus. vi. p. 153 (1881); Oates, op. cit. i. p. 196.

a. d. Aring, Kelantan. 6th Sept., 1899.

31. Otocompsa Jocosa (Linn.).

Lanius jocosa, Linn. Syst. Nat. i. p. 138 (ex Briss.) (1766).
Otocompsa jocosa (L.), Sharpe, Cat. Bds. Brit. Mus. vi. p. 157 (1881); Oates, op. cit. i. p. 198.

a, b. ♀. Biserat, Jalor. 14th May, 1899.

c. Q. Biserat, Jalor. June 1899.

32. IRENE PUELLA (Lath.).

Coracias puella, Lath. Ind. Orn. i. p. 171.

Irene puella (Lath.); Sharpe, Cat. Bds. Brit. Mus. v. p. 177 (1881); Oates, op. cit. i. p. 209.

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Irene malayana, Moore; Hartert, loc. cit. p. 389.

a. d. No particulars.

b. Q. Aring, Kelantan. 6th Sept., 1899.

33. Myiophoneus eugenii Hume.

Myiophoneus eugenii, Hume, Str. Feathers, 1873, p. 475; Sharpe, Cat. Bds. Brit. Mus. vii. p. 9 (1883); Oates, op. cit. i. p. 17.

a. Imm. Biserat, Jalor. 5th July, 1899.

34. TROCHALOPTERUM PENINSULÆ Sharpe.

Trochalopterum peninsulæ, Sharpe, P. Z. S. 1887, p. 436, pl. xxxvii.; Hart. et Butl. Nov. Zool. v. p. 506.

a, b. Q. Gunong Inas, Perak. 13th Dec., 1899. Iris and feet dark brown. Feeds on rattan fruit.

35. Copsychus saularis (Linn.).

Gracula saularis, Linn. Syst. Nat. i. p. 165 (1766).

Copsychus saularis (Linn.), Sharpe, Cat. Bds. Brit. Mus. vii. p. 61 (1883); Oates, op. cit. i. p. 20; Hartert, loc. cit. p. 381.

a. Q. Biserat, Jalor. 13th May, 1889.
 b. Q. Blembing, Legeh. 28th July, 1899.

e, d. 3 ♀. Aring, Kelantan. 13th & 30th Aug., 1899.

e. ♀. Kedah. 1st May, 1900.

36. Hydrocichla Ruficapilla (Temm.).

Enicurus ruficapilla, Temm. Pl. Col. iii. pl. 534 (1832).

Hydrocichla ruficapilla (Temm.), Sharpe, Cat. Bds. Brit. Mus. vii. p. 319 (1883); Oates, op. cit. i. p. 28; Sharpe, P. Z. S. 1886, p. 352.

a. Blembing, Legeh. 24th July, 1899.

37. Sibia simillima (Salvad.).

Heterophasia simillima, Salvad. Ann. Mus. Civic. Genov. xiv.

p. 232 (1879).

Sibia simillima (Salvad.), Sharpe, Cat. Bds. Brit. Mus. vii. p. 402 (1883); id. P. Z. S. 1886, p. 352; id. P. Z. S. 1888, p. 274; Hartert, loc. cit. p. 382.

 $a, b. \ \ \, \emptyset \ \ \,$ Gunong Inas, Perak. Dec. 1899.

38. Rhinocichla mitrata (S. Müll.).

Timalia mitrata, S. Müll. Nat. Tijdschr, 1835, p. 345, pl. 5.

fig. 3.

Rhinocichla mitrata (S. Müll.), Sharpe, Cat. Bds. Brit. Mus. vii. p. 452 (1883); id. P. Z. S. 1886, p. 352; id. P. Z. S. 1888, p. 274; Hartert, loc. cit. p. 383.

a. ♀. Gunong Inas, 4000 ft., Perak. 16th Dec., 1899.

Iris dark brown; bill orange; bare skin under eyes white; feet yellow.

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39. TURDINUS ABBOTTI (Blyth).

Malacocincla abbotti, Blyth, J. A. S. B. xvi. p. 601 (1845). Turdinus abbotti (Blyth), Sharpe, Cat. Bds. Brit. Mus. vii. p. 541 (1883); Oates, op. cit. i. p. 58.

Trichostoma abbotti (Blyth), Hartert, loc. cit. p. 383.

a. Q. Bukit Besar, Jalor, 30th April, 1899.

40. MIXORNIS GULARIS (Raffles).

Motacilla gularis, Raffles, Tr. Linn. Soc. xiii. p. 312 (1822).
 Mixornis gularis, Sharpe, Cat. Bds. Brit. Mus. vii. p. 576 (1882);
 id. P. Z. S. 1888, p. 275; Oates, op. cit. i. p. 51.

a. Biserat, Jalor. 16th May, 1899.

41. MIXORNIS ERYTHROPTERA (Blyth).

Timalia erythroptera, Blyth, J. A. S. B. xi. p. 794 (1842).

Mixornis erythroptera (Blyth), Sharpe, Cat. Bds. Brit. Mus. vii.
p. 580 (1883); Oates, op. cit. i. p. 51.

a. d. Ulu Selama, Perak. Dec. 1899.

Iris dark brown; bill black; feet greenish grey.

42. Corythocichla leucosticta Sharpe.

Corythocichla leucosticta, Sharpe, P. Z. S. 1887, p. 438.

a. ♀. Gunong Inas, Perak. 17th Dec., 1899.

Iris dark brown; feet yellowish brown; beak brownish black.

43. Pteruthius æralatus Tickell.

Pteruthius aeralatus, Tickell, J. A. S. B. 1855, p. 267; Sharpe, P. Z. S. 1887, p. 440; id. ibid. 1888, p. 276.

a, b. ♂♀. Gunong Inas, 4000 ft., Perak. 18th Dec., 1889. Iris slate-colour; feet yellowish brown; bill, upper mandible black, lower slate-colour.

44. SIVA CASTANEICAUDA Hume.

Siva castaneicauda, Hume, Str. F. 1877, p. 100; Sharpe, Cat. Bds. Brit. Mus. vii. p. 369 (1883); Oates, op. cit. i. p. 145; Sharpe, P. Z. S. 1888, p. 275.

a. d. Gunong Inas, 5000 ft., Perak. Dec. 1899.

45. ÆTHOPYGA SIPARAJA (Raffles).

Certhia siparaja, Raffles, Tr. Linn. Soc. xiii. p. 299 (1822). Æthopyga siparaja (Raffles), Oates, op. cit. i. p. 316; Gadow, Cat. Bds. Brit Mus. ix. p. 21 (1884).

a. d. Aring, Kelantan. 21st Aug., 1899.

46. Arachnothera crassirostris (Reichenb.).

Arachnocestra crassirostris, Reichenb. Handb., Scansoriæ, p. 314, no. 747, pl. 592. fig. 4016 (1854).

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Arachnothera crassirostris, Reichenb., Gadow, Cat. Bds. Brit. Mus. ix. p. 102 (1884).

a. d. Aring, Kelantan. 17th Sept., 1899.

b-d. ♀. Aring, Kelantan. 17th, 22nd, 26th Sept., 1899.

47. Anthrothreptes malaccensis (Scop.).

Certhia malaccensis, Scop. Del. Flor. et Faun. Insubr. ii. p. 91 (1786) (ex Sonnerat).

Anthreptes malaccensis (Scop.), Oates, op. cit. i. p. 324 (1883). Anthrothreptes malaccensis (Scop.), Gadow, Cat. Bds. Brit. Mus. ix. p. 122 (1884).

a. d. Biserat, Jalor. 16th May, 1899.

b. ♀. Bukit Besar, Jalor. 6th May, 1899.

c, d. d. Pulau, Bidang. 14th Dec., 1899.

48. DICÆUM CRUENTATUM (L.).

Certhia cruentata, Linn. Syst. Nat. i. p. 187 (1766).

Diceum cruentatum (Linn.), Anders. Zool. Res. Yunnan, p. 663 (1879); Oates, op. cit. i. p. 332; Sharpe, Cat. Bds. Brit. Mus. x. p. 15 (1885).

a-d. J. Aring, Kelantan. 21st Aug. and 13th Sept., 1899. e-g. ♀. Aring, Kelantan. 23rd Aug. and 10th & 15th Sept., 1899.

h. No particulars.

49. DICÆUM TRIGONOSTIGMA (Scop.).

Certhia trigonostigma, Scop. Del. Flor. et Faun. Insubr. ii. p. 91 (1786).

Dicœum trigonostigma (Scop.), Oates, op. cit. i. p. 336; Sharpe, Cat. Bds. Brit. Mus. x. p. 38 (1885).

a, b. d. Aring, Kelantan. 21st Aug. and 13th Sept., 1899.

c. Q. Aring, Kelantan.
d. d. No particulars. 18th Aug., 1899.

Bill orange below, black above; feet blue-black; iris pale brown.

50. DICÆUM IGNIPECTUS (Hodgs.).

Macrura ignipectus, Hodgs. Icon. ined. in Brit. Mus., Passeres, pl. 36. fig. 393.

Myzanthe ignipectus (Hodgs.), Oates, op. cit. i. p. 337.

Dicœum ignipectus (Hodgs.), Sharpe, Cat. Bds. Brit. Mus. x. p. 4 (1885); Scl. P. Z. S. 1887, p. 441.

a. Patelung. April 1899.

b. ♀. Aring, Kelantan. 26th Aug., 1899.

c. d. Gunong Inas (4000 ft.), Perak. 15th Dec., 1899.

51. DICÆUM CHRYSORRHEUM Temm.

Diceum chrysorrheum, Temm. Pl. Col. iv. pl. 478, fig. 1 (1829); Proc. Zool. Soc.—1901, Vol. I. No. V. [9]

Anders, Zool. Res. Yunnan, p. 663 (1879); Oates, op. cit. i, p. 335; Sharpe, Cat. Bds. Brit. Mus. x. p. 44 (1885).

a. d. Aring, Kelantan. 11th Sept., 1899.

52. HIRUNDO BADIA (Cass.).

Cecropis badia, Cass. Proc. Philad. Acad. 1853, p. 371.

Hirundo badia (Cass.), Sharpe, Cat. Bds. Brit. Mus. x. p. 166 (1885); Hartert, loc. cit. p. 390.

a. d. Biserat, Jalor. 27th May, 1899. b-d. Q. Biserat, Jalor. 27th May, 1899.

53. Anthus rufulus Vieill.

Anthus rufulus, Vieill. N. Diet. d'Hist. Nat. xxvi. p. 494 (1818); Sharpe, Cat. Bds. Brit. Mus. x. p. 574 (1885).

Corydalla rufula, Oates, op. cit. i. p. 168.

a. Tringganu. 31st Oct., 1899.

54. ACRIDOTHERES FUSCUS (Wagler).

Acridotheres fuscus (Wagler), Oates, op. cit. i. p. 380; Sharpe, Cat. Bds. Brit. Mus. xiii. p. 86 (1890).

a. d. Singgora, Patelung. 22nd April, 1899.b. d. Bukit Besar, Jalor. 7th May, 1899.

c. Biserat, Jalor. 16th May, 1899.

d-f. δ , Q Q. Tringganu. 22nd Oct., 1899.

Native name, "Gembala Kreban" (Buffalo-bird). Feet, beak, iris yellow.

55. Mainatus javanensis (Osbeck).

Corvus javanensis, Osbeck, Iter, p. 102 (1757).

Gracula javanensis (Osbeck), Oates, op. cit. i. p. 393; Hartert, loc. cit. p. 391.

Mainatus javanensis (Osbeck), Sharpe, Cat. Bds. Brit. Mus. xiii. p. 102 (1890).

a. ♀. Sungei Lebeh, Kelantan. 5th Aug., 1899.

56. Mainatus intermedius (A. Hay).

Gracula intermedia, A. Hay, Madr. Journ. xiii. pl. 2, p. 157 (1844); Oates, op. cit. i. p. 391.

Mainatus intermedius (A. Hay), Sharpe, Cat. Bds. Brit. Mus.

xiii. p. 104 (1890).

 $a, b, \beta \circ A$. Biserat, Jalor. 11th May, 1899.

c. J. Ulu Krian, Kedah. Dec. 1899.

57. Calornis Chalybea (Horsf.).

Turdus chalybeus, Horsf. Trans. Linn. Soc. xiii. p. 148 (1820). Calornis chalybea (Horsf.), Hartert, loc. cit. p. 391; Sharpe, Cat. Bds. Brit. Mus. xiii. p. 143 (1890).

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a. d. Tale Nowy, Patelung. April 1899.

b, c. Imm. Khota Bharu, Kelantan. 14th June, 1899.

d, e. Q. Tringganu. 26th Oct., 1899.

58. Munia maja (L.).

Loxia maja, Linn. Syst. Nat. i. p. 301 (1766).

Munia maja, Sharpe, Cat. Bds. Brit. Mus. xiii. p. 332 (1890).

a-c. ♂. Biserat, Jalor. 17th May, 1899.

d. ♀. Biserat, Jalor. 20th May, 1899.

59. Munia atricapilla (Vieill.).

Lovia atricapilla, Vieill. Ois. Chant. p. 84, pl. 53 (1805).

Amadina atricapilla, Oates, op. cit. i. p. 366.

Munia atricapilla, Ánders. Zool. Res. Yunnan, p. 598 (1879); Sharpe, Cat. Bds. Brit. Mus. xiii. p. 334 (1890).

a. d. Biserat, Jalor. 14th May, 1899.

b. No particulars.

60. PLOCEUS ATRIGULA Hodgs.

Ploceus atrigula, Hodgs. Icon. ined. in Brit. Mus., Passeres, pl. 278. figs. I & 2 (no. 743); Sharpe, Cat. Bds. Brit. Mus. xiii. p. 491 (1890).

Ploceus baya, Anders. Zool. Res. Yunnan, p. 597 (1879); Oates,

op. cit. i. p. 358; Hartert, loc. cit. p. 391.

a-c. 3. Khota Bharu, Kelantan. 24th June and 10th July, 1899.

61. PITTA CYANOPTERA Temm.

Pitta cyanoptera, Temm. Pl. Col. 218 (1823); Sclater, Cat. Bds. Brit. Mus. xiv. p. 420 (1888).

Pitta moluccensis, P. L. S. Müll., Oates, op. cit. i. p. 415.

a. Aring, Kelantan. Oct. 1899.

b, c. J. Tringganu. 31st Oct., 1899.

Bill black; feet flesh-coloured; iris brown.

62. PITTA CUCULLATA Hartl.

Pitta cucullata, Hartl. Rev. Zool. 1843, p. 65; Oates, op. cit. i. p. 414; Sclater, Cat. Bds. Brit. Mus. xiv. p. 442 (1888).

a. Q. Tringganu. 31st Oct., 1899.

Bill black; feet flesh-coloured; iris brown.

63. CALYPTONEMA VIRIDIS Raffl.

Calyptonema viridis, Raffl. Trans. Linn. Soc. xiii. p. 295; Oates, op. cit. i. p. 442; Sclater, Cat. Bds. Brit. Mus. xiv. p. 456 (1888).

a. d. Aring, Kelantan. 2nd Sept., 1899.

b. ♀. Singapore. Nov. 1899.

Bill and feet dirty green; iris pale.

64. Eurylæmus ochromelas Raffles.

Eurylæmus ochromelas, Raffles, Trans. Linn. Soc. xiii. p. 297 (1822); Oates, op. cit. i. p. 426; Sharpe, P. Z. S. 1887, p. 432; Sclater, Cat. Bds. Brit. Mus. xiv. p. 465 (1888); Hartert, loc. cit. p. 391.

a. Aring, Kelantan. 8th Sept., 1899.

65. Cymborhynchus macrorhynchus (Gm.).

Todus macrorhynchus, Gm. Syst. Nat. i. p. 446.

Cymborhynchus macrorhynchus, Oates, op. cit. i. p. 428; Sclater, Cat. Bds. Brit. Mus. xiv. p. 468 (1888); Hartert, loc. cit. p. 393.

a. ♀. Biserat, Jalor. 16th May, 1899.

b, c. ♂ \ Aring, Kelantan. 1st Sept., 1899.

d, e. 9. Tringganu. 29th Oct., 1899.

Bill above blue, below yellowish brown; feet blue-black; iris green. "Rain-bird," so called because its note is heard at the opening of the rainy season. Nests said to be rare.

66. UPUPA INDICA Reichenb.

Upupa indica, Reichenb. Handb. Scansores, p. 320, Taf. dxcvi. fig. 4037 (1853); Hartert, Cat. Bds. Brit. Mus. xvi. p. 10 (1892). Upupa nigripennis, Anders. Zool. Res. Yunnan, p. 578 (1879). Upupa longirostris, Jerd., Oates, op. cit. ii. p. 62.

a. Singgora?

67. COLLOCALIA INNOMINATA Hume.

Collocalia innominata, Hume, Stray Feath. i. p. 294 (1873); Oates, op. cit. ii. p. 7; Hartert, Cat. Bds. Brit. Mus. xvi. p. 503 (1892).

a, b. No particulars.

68. Caprimulgus macrurus Horsf.

Caprimulgus macrurus, Horsf. Trans. Linn. Soc. xiii. p. 142 (1821); Oates, op. cit. ii. p. 20; Hartert, Journ. für Orn. 1889, p. 401; id. Cat. Bds. Brit. Mus. xvi. p. 537 (1892).

 a, b, φ . Aring, Kelantan. Aug. 1899.

69. Eurystomus orientalis (Linn.).

Coracias orientalis, Linn. S. N. i. p. 159 (1766).

Eurystomus orientalis (Linn.), Oates, op. cit. ii. p. 70; Sharpe, Cat. Bds. Brit. Mus. xvii. p. 33 (1892).

a, b. ♂♀. Bukit Besar, Jalor. 7th May, 1899.

c. Q. Biserat, Jalor. 10th May, 1899.

d. d juv. Khota Bharu, Kelantan. 24th June, 1899.

e. d. Khota Bharu, Kelantan. 4th Oct., 1899.

f. d. Aring, Kelantan. 31st Aug., 1899.

Bill and feet orange-red.

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70. Merops sumatrensis Raffles.

Merops sumatrensis, Raffles, Trans. Linn. Soc. xii. p. 294 (1822); Sharpe, Cat. Bds. Brit. Mus. xvii. p. 61 (1892).

a, b. d. Biserat, Jalor. 15th May, 1899.

c, d. Q. Biserat, Jalor. 5th & 14th May, 1899.

71. Nyctiornis amicta (Temm.).

Merops amictus, Temm. Pl. Col. iv. pl. 310 (1824).

Nyctiornis amictus (Temm.), Oates, op. cit. ii. p. 64; Sharpe, Cat. Bds. Brit. Mus. xvii. p. 90 (1892).

a, b. J. Aring, Kelantan. 4th Sept., 1899.

72. Pelargopsis fraseri Sharpe.

Pelargopsis fraseri, Sharpe, P. Z. S. 1870, p. 65; id. Cat. Bds. Brit. Mus. xvii. p. 106 (1892).

a. d. Parit Buntar, Perak. 17th Jan., 1900.

Bill and feet red.

73. Alcedo Ispida Linn.

Alcedo ispida, Linn. Syst. Nat. i. p. 179 (1766); Anders. Zool. Res. Yunnan, p. 580 (1879); Sharpe, Cat. Bds. Brit. Mus. xvii. p. 141 (1892).

Alcedo bengalensis, Oates, op. cit. ii. p. 72.

a. Perak. Dec. 1899.

74. CEYX EUERYTHRA Sharpe.

Ceyx euerythra, Sharpe, Cat. Bds. Brit. Mus. xvii. p. 179 (1892).

a. d. Aring, Kelantan. 26th Aug., 1899.

b, c. Aring, Kelantan. 31st Aug., 1899.

75. HALCYON SMYRNENSIS (Linn.).

Alcedo smyrnensis, Linn. Syst Nat. i. p. 181 (1766).

Halcyon smyruensis (Linn.), Anders. Zool. Res. Yunnan, p. 579 (1879); Oates, op. cit. ii. p. 182; Sharpe, Cat. Bds. Brit. Mus. xvii. p. 222 (1892).

Halcyon fusca, Hartert, Journ. für Orn. 1889, p. 401.

a, b. ♂♀. Bukit Besar, Jalor. 1st May, 1899.
c. Biserat, Jalor. 21st May, 1899.

d, e. Tringganu. 29th Oct., 1899.

f. No particulars.

Bill and feet red; iris brown.

76. HALCYON HUMII Sharpe.

Halcyon humii, Sharpe, Cat. Bds. Brit. Mus. xvii. p. 281 (1892).

a. Patani. 28th June, 1899.

b, c. ♀♀. Khota Bharu, Kelantan. 4th Oct., 1899.

d, e, f. & ♀♀. Tringganu. 26th Oct., 1899.

g, h. No particulars.

Bill black above, bluish white below; feet bluish black; iris brown.

77. Buceros rhinoceros L.

Buceros rhinoceros, Linn. Syst. Nat. i. p. 153 (1766); Grant, Cat. B. Brit. Mus. xvii. p. 352 (1892).

a. d. No particulars.

78. Dichoceros bicornis (Linn.).

Buceros bicornis, Linn. Syst. Nat. i. p. 153 (1766).

Dichoceros bicornis (Linn.), Oates, op. cit. ii. p. 87; Hartert, Journ. für Orn. 1889, p. 402; Grant, Cat. Bds. Brit. Mus. xvii. p. 355 (1892).

a. d. Biserat, Jalor. 16th May, 1899.
 b. c. Imm. Biserat, Jalor. 18th May, 1899.

79. Anthracoceros convexus (Temm.).

Buceros convexus, Temm. Pl. Col. ii. p. 82, pl. 530 (\$\mathbb{Q}\$) (1832).

Anthraeoceros convexus (Temm.), Grant, Cat. Bds. Brit. Mus. xvii. p. 364 (1892).

a. ♀ juv. Bukit Besar, Jalor. 8th May, 1899.

b. Biserat, Jalor. 17th May, 1899.c. Tremangam. 12th July, 1899.

d. d. Aring, Kelantan. 12th Aug., 1899.
 e. d juv. Aring, Kelantan. 6th Oct., 1899.

f. No particulars.

80. Anthracoceros malabaricus (Gm.).

Buceros malabaricus, Gm. S. N. i. p. 359 (1788).

Anthracoceros albirostris, Oates, op. cit. ii. p. 90.

Anthracoceros malabaricus (Gm.), Grant, Cat. Bds. Brit. Mus. xvii. p. 365 (1892).

a. Koh Nam Kam, Patelung. 12th April, 1899.

b. Tremangam. 12th July, 1899.

c. No particulars.

81. Anorrhinus galeritus (Temin.).

Buceros galeritus, Temm. Pl. Col. ii. p. 78, pl. 520 (1824).

Anorrhinus galeritus (Temm.), Oates, op. cit. ii. p. 95; Grant,
Cat. Bds. Brit. Mus. xvii. p. 391 (1892).

a. Q. Gunong Inas (4000 ft.), Perak. 17th Dec., 1899.

Feet black; iris dull red; bare skin blue-black.

82. Harpactes duvauceli (Temm.).

Trogon duvauceli, Temm. Pl. Col. no. 291 (1824).

Harpactes duvauceli (Temm.), Oates, op. cit. ii. p. 101; Sharpe, P. Z. S. 1886, p. 353; Grant, Cat. Bds. Brit. Mus. xvii. p. 491 (1892).

a. d. Aring, Kelantan. 11th Sept., 1899.

b. No particulars.

Bill bluish black; feet black; iris bluish.

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83. Chrysophlegma malaccense (Lath.).

Picus malaccensis, Lath. Ind. Orn. i. p. 241 (1790).

Callolophus malaccensis, Oates, op. cit. ii. p. 147.

Chrysophlegma malaccense, Sharpe, P. Z. S. 1887, p. 442; Hargitt, Cat. Bds. Brit. Mus. xviii. p. 122 (1890).

a. d. Aring, Kelantan. 30th Aug., 1899.

b. Q. Khota Bharu, Kelantan. 4th Oct., 1899.

Bill black above, pale below; feet dirty green.

84. Chrysophlegma wrayi Sharpe.

Chrysophlegma wrayi, Sharpe, P. Z. S. 1888, p. 279; Hargitt, Cat. Bds. Brit. Mus. xviii. p. 130 (1890).

a. d. Gunong Inas (4000 ft.), Perak. 16th Dec., 1899.

Bill slate-colour; feet black; iris red-brown.

This specimen, which is, so far as I am aware, the first male known, is somewhat larger than the type; its dimensions being: head and body 180 mm., tail 126, wing 150, tarsus 25. It differs from the female in the malar stripe being light buff instead of chestnut, and is still further distinguished in having the chin (which in the males of *C. styani* and *C. ricketti* is dark) of the same colour, viz. light buff, separated from the malar stripe by a narrow line of dark brown. The crown of the head is more rufous than in the female and the bill lighter, being bluish slate in colour; the quills and tail are black, not dark brown.

With regard to *C. flavinucha*, apart from size (for *C. wrayi* is considerably smaller) it differs in the presence of the brown band separating the buff malar stripe from the buff of the chin. The colour of the nape, which is of a golden yellow in *C. wrayi*, is of a deep orange in *C. flavinucha*, and the buff of the throat in the last named is also of a much deeper tint. As regards the primaries, taking the outer web of the 2nd primary for comparison, we find that in *C. ricketti* there are six complete chestnut bars, in *C. styani* five, in *C. pierri* from Cochin China four, and in *C. wrayi* and *C. flavinucha* three; in all cases there is in addition a small incomplete bar or dot at the distal end.

In regard to the size of these species, *C. ricketti* is the largest, then come *C. pierri* and *C. flavinucha* in order, and lastly *C. styani* and *C. wrayi*, which are about equal, but it is noticeable that

C. styani has the largest bill of any.

85. MIGLYPTES GRAMMITHORAX (Malh.).

Phaiopicus grammithorax, Malh. Picidæ, ii. p. 12, pl. xlviii. figs. 4 & 5 (1862).

Miglyptes grammithorax (Malh.), Sharpe, P. Z. S. 1887, p. 443; Hargitt, Cat. Bds. Brit. Mus. xviii. p. 385 (1890).

a. Q. Ulu Aring, Kelantan. Sept. 1899.

86. Miglyptes tukki (Less.).

Picus tukki, Less. Rev. Zool. 1839, p. 167.

Miglyptes tukki (Less.), Oates, op. cit. ii. p. 61; Sharpe, P. Z. S. 1888, p. 279; Hargitt, Cat. Bds. Brit. Mus. xviii. p. 388 (1890).

a. d. Biserat, Jalor. 16th May, 1899.

b. J. Aring, Kelantan. Aug. 1899.

c. Q. Aring, Kelantan. 4th Sept., 1899.

Bill black above, grey below; feet dirty green; iris chocolate.

87. Micropternus Brachyurus (Vieill.).

Picus brachyurus, Vieill. Nouv. Dict. d'Hist. Nat. xxvi. p. 103 (1818).

Micropternus brachyurus (Vieill.), Oates, op. cit. ii. p. 58; Sharpe, P. Z. S. 1888, p. 279; Hargitt, Cat. Bds. Brit. Mus. xviii. p. 396 (1890).

a. d. Biserat, Jalor. 27th May, 1899.

b. Q. Aring, Kelantan. 22nd Aug., 1899.

88. Tiga Javanensis (Ljung).

Picus javanensis, Ljung, Mem. Acad. Roy. Stock. 1797, p. 134, pl. vi., $\mathfrak Q$.

Tiga javanensis (Ljung), Oates, op. cit. ii. p. 55; Hargitt, Cat.

Bds. Brit. Mus. xviii. p. 412 (1890).

a. d. Biserat, Jalor. 21st May, 1899.
b. Q. Biserat, Jalor. 10th May, 1899.

c, d. ♂ ♀. Biserat, Jalor. 5th July, 1899. e. ♂. Ulu Selama, Perak. 10th Jan., 1900.

Bill and feet dark brown; iris brown.

89. Chrysocolaptes validus (Temm.).

Picus validus, Temm. Pl. Col. 378, & (1825).

Chrysocolaptes validus (Temm.), Hargitt, Cat. Bds. Brit. Mus. xviii, p. 458 (1890).

a. d. Aring, Kelantan. 8th Sept., 1899.

Bill above dark brown, below yellow; feet and iris yellow.

90. Chotorhea chrysopogon (Temm.).

Bucco chrysopogon, Temm. Pl. Col. iii. 1824, p. 285.

Chotorhea chrysopogon (Temm.), Shelley, Cat. Bds. Brit. Mus. xix. p. 57 (1891).

a. Q. Bukit Besar, Jalor. 5th May, 1899.

b. Ulu Selama, Perak. Jan. 1900.

91. Cyanops henrici (Temm.).

Bucco henrici, Temm. Pl. Col. iii. pl. 524 (1831).

Megalæma henrici (Temm.), Hartert, Journ. für Orn. 1889, p. 402.

Cyanops henrici (Temm.), Shelley, Cat. Bds. Brit. Mus. xix. p. 67 (1891).

a. d. Aring, Kelantan. 7th Sept., 1899.

Bill and iris black; feet greenish grey.

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92. Cyanops ramsayı (Wald.).

Megalæma ramsayi, Wald. Ann. Mag. Nat. Hist. (4) xv. p. 400

(1876).

Cyanops ramsayi (Wald.), Oates, op. cit. ii. p. 135; Sharpe, P. Z. S. 1887, p. 442; Shelley, Cat. Bds. Brit. Mus. xix. p. 70 (1891).

a, b. ♂♀. Gunong Inas (4000 ft.), Perak. 17th Dec., 1899. Iris dark brown; feet slaty brown.

93. Cyanops mystacophanes (Temm.).

Bucco mystacophanes, Temm. Pl. Col. iii. p. 315 (1824).

Chotorhea mystacophanes (Temm.), Oates, op. cit. ii. p. 130.

Cyanops mystacophanes (Temm.), Shelley, Cat. Bds. Brit. Mus. xix. p. 72 (1891).

a. d. Bukit Besar (2000 ft.), Jalor. 5th May, 1899.

b, c. o ♀. Biserat, Jalor. 19th May, 1899. d. ♀. Aring, Kelantan. 7th Sept., 1899.

e. d. Ulu Selama, Perak. 6th Jan., 1900.

Feet and bill black; iris dark brown.

94. CYANOPS LINEATA (Vieill.).

Capito lineata, Vieill. N. Dict. d'Hist. Nat. iv. p. 500 (1816). Megalæma hodgsoni, Bp., Anders. Zool. Res. Yunnan, p. 583 (1878).

Cyanops hodgsoni (Bp.), Oates, op. cit. ii. p. 132.

Cyanops lineata (Vieill.), Shelley, Cat. Bds. Brit. Mus. xix. p. 81 (1891).

a. Kedah. 6th May, 1900.

95. Mesobucco duvauceli (Less.).

Bucco duvauceli, Less. Traité, p. 164 (1831).

Megalæma duvauceli (Less.), Hartert, Journ. f. Orn. 1889, p. 402.

Mesobucco duvauceli (Less.), Shelley, Cat. Bds. Brit. Mus. xix. p. 85 (1891).

a. d. Aring, Kelantan. 7th Sept., 1899.

b. ♂ imm. Aring, Kelantan. 7th Sept., 1899. c, d. ♂ ♀. Ulu Selama, Perak. Jan. 1900.

Bill and feet black; iris dark brown.

96. Xantholæma hæmatocephala Marshall.

Xantholama hamatocephala, Marshall, Monogr. Capit. p. 101, pl. 42 (1871); Shelley, Cat. Bds. Brit. Mus. xix. p. 87 (1891). Xantholæma hæmacephala, Oates, op. cit. ii. p. 136.

a. Tringganu. 26th Oct., 1899.

Bill black; feet brownish red; iris brown; skin round eye striped with brownish-red stripes.

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97. Surniculus lugubris (Horsf.).

Cuculus lugubris, Horsf. Tr. Linn. Soc. xiii. p. 179 (1822).

Surniculus lubugris (Horsf.), Anders. Zool. Res. Yunnan, p. 587 (1879); Oates, op. cit. ii. p. 112; Shelley, Cat. Bds. Brit. Mus. xix. p. 227 (1891).

a, b. d imm. Aring, Kelantan. Aug. 1899.

98. Cuculus micropterus Gould.

Cuculus micropterus, Gould, P. Z. S. 1837, p. 137; Shelley, Cat. Bds. Brit. Mus. xix. p. 241 (1891).

Cuculus striatus, Drap., Oates, op. cit. ii. p. 105.

a. Q. Blimbing, Legeh. 24th July, 1899.

b. J. Aring, Kelantan. 2nd Sept., 1899.

Bill above black, below yellowish; feet yellow; eyelid yellow.

99. CACOMANTIS MERULINUS (Scop.).

Cuculus merulinus, Scop. Del. Flor. et Faun. Insubr. ii. p. 89 (1786).

Cacomantis rufiventris (Gray), Anders. Zool. Res. Yunnan, p. 587 (1879).

Cacomantis threnodes (Cab.), Oates, op. cit. ii. p. 111.

Cacomantis merulinus (Scop.), Shelley, Cat. Bds. Brit. Mus. xix. p. 268 (1891).

a. Khota Bharu, Kelantan. 14th Oct., 1899.

b. J. Tringganu. 28th Oct., 1899.

Bill black, yellowish at base of lower mandible; feet yellow; eye purplish brown.

100. Eudynamis honorata (Linn.).

Cuculus honorata, Linn. Syst. Nat. i. p. 179 (1766, ex Briss. pl. ii. fig. 2).

Eudynamis malayana, Cab., Oates, op. cit. ii. p. 119.

Eudynamis honorata (L.), Shelley, Cat. Bds. Brit. Mus. xix. p. 316 (1891).

a, b. J. Bukit Besar, Jalor. 30th April, 1899.

c. d. Biserat, Jalor. 5th July, 1899.

d, e. ♂♀. Khota Bharu, Kelantan. 8th July, 1899.

101. Centropus sinensis (Steph.).

Polophilus sinensis, Steph. Gen. Zool. ix. p. 51 (1815).

Centrococcyx intermedius, Hume, Oates, op. cit. ii. p. 126.

Centropus sinensis (Steph.), Shelley, Cat. Bds. Brit. Mus. xix. p. 343 (1891).

a. d. Bukit Besar, Jalor. 6th May, 1899.

b. d. Aring, Kelantan. 31st Aug., 1899.

c. Nestling (no particulars).

The nestling, which has unfortunately no data, is in an interesting stage of plumage, and I therefore add a short description:—The feathers of the crown, nape, and neck are black, [18]

glossed with greenish and barred with chestnut. Scapulars, wings, and primaries chestnut, narrowly barred with black; down on the rump tipped with rufous; tail barred with white. The whole of the underparts and sides of the head barred with whitish. The white bars below and the black bars on the scapulars persist long after the rest of the plumage is adult.

102. Centropus Javanicus (Dumont).

Cuculus javanicus, Dumont, Diet. Sc. Nat. xi. p. 144 (1818). Centropus javanicus (Dumont), Shelley, Cat. Bds. Brit. Mus. xix. p. 354 (1891).

Kedah. 18th May, 1900. $a. \ d$ imm.

103. Zanclostomus javanicus (Horsf.).

Phænicophæus javanicus, Horsf. Trans. Linn. Soc. xiii. p. 178 (1822).

Zanclostomus javanicus (Horsf.), Oates, op. cit. ii. p. 125; Shelley, Cat. Bds. Brit. Mus. xix. p. 380 (1891).

a. ♀. Aring, Kelantan. 28th Aug., 1899. b, c. of Q. Aring, Kelantan. 8th Sept., 1899. Bill red; feet bluish black.

104. Rhopodytes tristis (Less.).

Melias tristis, Less. Traité Orn. 1831, p. 132.

Rhopodytes tristis (Less.), Oates, op. cit. ii. p. 121; Shelley, Cat. Bds. Brit. Mus. xix. p. 386 (1891).

a. Q. Khota Bharu, Kelantan. 8th July, 1899. b, c. Q. Khota Bharu, Kelantan. 5th Oct., 1899.

d, e. ♀. Kedah. 3rd May, 1900.

Bill green; feet blue-black; skin round eye red.

105. Rhopodytes diardi (Less.).

Melias diardi, Less. Traité, p. 132 (1831).

Rhopodytes diardi (Less.), Oates, op. cit. ii. p. 122; Shelley, Cat. Bds. Brit. Mus. xix. p. 390 (1891).

a. d. Biserat, Jalor. 13th May, 1899. b. Q. Blimbing, Legeh. 28th July, 1899. c, d. d. Aring, Kelantan. Aug. 1899.

e, f. & Q. Aring, Kelantan. 2nd Sept., 1899. g. Q. Aring, Kelantan. 7th Sept., 1899.

Bill green; feet black; skin round eye red.

106. Rhinortha Chlorophæa (Raffles).

Cuculus chlorophæus, Raffles, Tr. Linn. Soc. xiii. p. 288 (1822). Rhinortha chlorophæa (Raffles), Oates, op. cit. ii. p. 120; Shelley, Cat. Bds. Brit. Mus. xix. p. 393 (1891).

a. Q. Blimbing, Legeh. 24th July, 1899. b, c. & Q. Kuala Lebeh, Kelantan. 17th Aug., 1899.

d, e. J. Aring, Kelantan. 28th Aug., 1899.

f-k. Q. Aring, Kelantan. Aug. 1899.

m. No particulars.

Bill green; feet blue-black.

107. UROCOCCYX ERYTHROGNATHUS (Hartl.).

Phænicophæus erythrognathus, Hartl. Ver. Mus. Brem. 1844, p. 95.

Urococcyx erythrognathus (Hartl.), Oates, op. cit. ii. p. 124; Shelley, Cat. Bds. Brit. Mus. xix. p. 398 (1891).

a. d. Blembing, Legeh. 28th July, 1899.
 b. Q. Aring, Kelantan. 29th Aug., 1899.

Bill green, red at base of lower mandible; feet black; skin round eye red.

108. PALÆORNIS LONGICAUDA (Bodd.).

Psittacus longicauda, Bodd. Tabl. Pl. Enl. p. 53 (1783).

Palæornis longicauda (Bodd.), Oates, op. cit. ii. p. 144; Salvad. Cat. Bds. Brit. Mus. xx. p. 475 (1891).

a. d. Ulu Selama, Perak. Dec. 1899.

Bill and feet dark grey.

109. PSITTINUS INCERTUS (Shaw).

Psittacus incertus, Shaw, Nat. Misc. pl. 769 (1790).

Isittinus incertus (Shaw), Oates, op. cit. ii. p. 147; Salvad. Cat. Bds. Brit. Mus. xx. p. 501 (1891).

a. d. Biserat, Jalor. June 1899.

b, c. ♂♀. Aring, Kelantan, 12th Sept., 1899. d, e. ♂♀. Kwala Selama, Perak. Dec. 1899.

Bill, &, above red, below yellowish black; Q, above brown, below yellowish grey; feet green; iris yellow.

110. Loriculus galgulus (Linn.).

Psittacus galgulus, Linn. Amœn. Acad. iv. p. 236 (1754).

Loriculus galgulus (Linn.), Salvad. Cat. Bds. Brit. Mus. xx.
p. 531 (1891).

a. Patelung. April 1899.

b. J. Patani. 26th April, 1899.

c. No particulars.

111. Butreron capelli (Temm.).

Columba capelli, Temm. Pl. Col. 143 (livr. 24, 1823) (Java).
Butreron capelli (Temm.), Salvad. Cat. Bds. Brit. Mus. xxi.
p. 32 (1893).

a. Q. Aring, Kelantan. 5th Sept., 1899.

Bill pale green; feet deep yellow.

112. Osmotreron vernans (Linn.).

Columba vernans, Linn. Mant. p. 526 (1771) (ex Briss.). [20]

Osmotreron vernans (Linn.), Oates, op. cit. ii. p. 309; Salvad. Cat. Bds. Brit. Mus. xxi. p. 60 (1893).

a. Q. Biserat, Jalor. 12th May, 1899.

b. No particulars.

113. OSMOTRERON OLAX (Temm.).

Columba olax, Temm. Pl. Col. 241 (livr. 41, 1823) (Sumatra).

Osmotreron olax (Temm.), Salvad. Cat. Bds. Brit. Mus. xxi. p. 64
(1893).

a. J. Aring, Kelantan. 31st Aug., 1899.

Bill green; feet red; iris whitish.

114. PTILOPUS JAMBU (Gm.).

Columba jambu, Gm. S. N. ii. 2, p. 784, no. 63 (1788).

Ptilopus jambu (Gm.), Sharpe, P. Z. S. 1887, p. 432; Salvad. Cat. Bds. Brit. Mus. xxi. p. 80 (1893).

a, b. Aring, Kelantan. 18th Sept., 1899.

Bill and iris orange; feet magenta.

115. Turtur tigrinus (Temm.).

Columba tigrina, Temm. & Knip, Pig. i. p. 43 (1808–1811). Turtur tigrinus (Temm. & Knip), Anders. Zool. Res. Yunnan, p. 665 (1897); Oates, op. cit. ii. p. 290; Salvad. Cat. Bds. Brit.

Mus. xxi. p. 440 (1893).

a. ♂. Tale Nowy, Patani. 3rd April, 1899.
b. ♀. Aring, Kelantan. 16th Aug., 1899.

c. Ulu Aring, Kelantan. Sept. 1899.

d. Jimm. Khota Bharu, Kelantan. 5th Oct., 1899.

e. Tringganu. 22nd Oct., 1899.

f. No particulars.

116. CHALCOPHAPS INDICA (Linn.).

Columba indica, Linn. S. N. i. p. 284, no. 29 (1766) (ex

Edwards).

Chalcophaps indica (Linn.), Anders. Zool. Res. Yunnan, p. 677; Oates, op. cit. ii. p. 297; Salvad. Cat. Bds. Brit. Mus. xxi. p. 514 (1893).

a. Q. Biserat, Jalor. 22nd May, 1899.

b. Imm. Aring, Kelantan. 4th Sept., 1899.

117. CALŒNAS NICOBARICA (Linn.).

Columba nicobarica, Linn. S. N. i. p. 283, no. 27 (1766).

Calcenas nicobarica (L.), Salvad. Cat. Bds. Brit. Mus. xxi. p. 615 (1893).

a. Q. Khota Bharu, Kelantan. Oct. 1899.

118. Excalfactoria chinensis (L.).

Tetrao chinensis, Linn. S. N. i. p. 277 (1766).

Excalfactoria chinensis (Linn.), Oates, op. cit. ii. p. 334; Grant, Cat. Bds. Brit. Mus. xxii. p. 250 (1893).

a. J. Bukit Besar, Jalor. 30th April, 1899.

b. d. Biserat, Jalor. 11th May, 1899.

119. Gallus gallus (L.).

Phasianus gallus, Linn. S. N. i. p. 270 (1766).

Gallus ferrugineus (Gm.), Anders. Zool. Res. Yunnan. p. 669 (1879); Oates, op. cit. ii. p. 322.

Gallus gallus (L.), Grant, Cat. Bds. Brit. Mus. xxii. p. 344

(1893).

a. Q. Khota Bharu, Kelantan. 8th July, 1899.

b. d. Kwala Selama, Perak. 15th Jan., 1900.

120. POLYPLECTRON BICALCARATUM (L.).

Pavo bicalcaratum, Linn. S. N. i. p. 268 (1766).

Polyplectron bicalearatum (L.), Grant, Cat. Bds. Brit. Mus. xxii. p. 358 (1893).

a. Q. Sungei Lebeh, Kelantan. 5th Aug., 1899.

b. d. Aring, Kelantan. 17th Sept., 1899.

Bill and feet black; iris white; skin round the eye orange.

121. Argusianus argus (Linn.).

Phasianus argus, Linn. S. N. i. p. 272 (1766).

Argusianus argus (L.), Oates, op. cit. ii. p. 313; Grant, Cat. Bds. Brit. Mus. xxii. p. 363 (1893).

a, b. d. Biserat, Jalor. May 1899.

c. ♀. Sisa Kwani.

d. Q. Aring, Kelantan. 17th Sept., 1899.

e. Pull. No particulars.

122. Pavo muticus Linn.

Pavo muticus, Linn. S. N. i. p. 268 (1766); Anders. Zool. Res. Yunnan, p. 668 (1879); Oates, op. cit. ii. p. 312; Grant, Cat. Bds. Brit. Mus. xxii. p. 372 (1893).

a-c. 5 specimens, no particulars.

123. Turnix taigoor (Sykes).

Hemipodius taigoor, Sykes, P. Z. S. 1832, p. 155.

Turnix plumbipes, Hodgs., Anders. Zool. Res. Yunnan, p. 673 (1879); Oates, op. cit. ii. p. 337.

Turnix taigoor (Sykes), Grant, Cat. Bds. Brit. Mus. xxii. p. 530

(1893).

a. d. Patelung. 31st March, 1899.

b. Q. Bukit Besar, Jalor. 3rd May, 1899.

. Q. Aring, Kelantan. 20th Aug., 1899.

124. Rallina fasciata (Raffles).

Rallus fasciata, Raffles, Tr. Linn. Soc. xiii. p. 328 (1822). [22]

Rallina fasciata (Raffles), Oates, op. cit. ii. p. 341; Sharpe, Cat. Bds. Brit. Mus. xxiii. p. 75 (1894).

a. Patani. April 1899.

b, c. ♂ ♀. Biserat, Jalor. 18th May, 1899.

125. PORZANA PUSILLA (Pall.).

Rallus pusillus, Pall. Reis. Russ. Reichs, iii. App. p. 700 (1776).

Porzana bailloni, Oates, op. cit. ii. p. 334.

Porzana pusitlus (Pall.), Sharpe, Cat. Bds. Brit. Mus. xxiii. p. 106 (1894).

a. Q. Patelung. 7th April, 1899.

126. Gallicrex cinerea (Gm.).

Fulica cinerea, Gm. Syst. Nat. i. p. 702 (1788).

Gallicrex cinerea (Gm.), Oates, op. cit. ii. p. 349; Sharpe, Cat. Bds. Brit. Mus. xxiii. p. 183 (1894).

a. J. Bangkok, Patelung. 4th April, 1899.
b. Q. Parit Buntar, Perak. 17th Jan., 1900.

127. Heliopais personata (Gray).

Podica personata, Gray, P. Z. S. 1848, p. 90.

Heliopais personata (Gray), Oates, op. cit. ii. p. 353; Sharpe, Cat. Bds. Brit. Mus. xxiii. p. 232 (1894).

a. Q. Biserat, Jalor. 19th May, 1899.

128. GLAREOLA ORIENTALIS Leach.

Glareola orientalis, Leach, Trans. Linn. Soc. xiii. p. 132, pl. xiii. (1822); Oates, op. cit. ii. p. 361; Sharpe, Cat. Bds. Brit. Mus. xxiv. p. 58 (1896).

a. Q. Ana Bukit, Kedah. 12th May, 1900.

b, c. Kedah. 10th May, 1900.

129. Charadrius dominicus Müll.

Charadrius dominicus, P. L. S. Müll. Syst. Nat. Anhang, p. 116 (1776); Sharpe, Cat. Bds. Brit. Mus. xxiv. p. 195 (1896).

Charadrius fulvus, Gm., Anders. Zool. Res. Yunnan, p. 675 (1879); Oates, op. cit. ii. p. 364.

a, b. ♂♀. Patelung. 2nd April, 1899.

c. Q. Tringganu. 31st Oct., 1899.

130. ÆGIALITIS ALEXANDRINA (Linn.).

Charadrius alexandrinus, Linn. S. N. i. p. 258 (1766).

Ægialitis alexandrina (L.), Sharpe, Cat. Bds. Brit. Mus. xxiv. p. 275 (1896).

a. Q. Tringganu. 29th Oct., 1899.

b. ♀. Pulau Bidang. 10th Dec., 1899.

Malay name, "Kedidi."

131. Tringoides hypoleucus Linn.

Tringa hypoleucus, Linn. S. N. i. p. 250 (1766).

Tringoides hypoleucus (L.), Oates, op. cit. ii. p. 399; Sharpe, Cat. Bds. Brit. Mus. xxiv. p. 456 (1896).

a. ♀. Pulau Bidang. 10th Dec., 1899.

132. Rhyacophilus glareola (L.).

Tringa ochropus, \(\beta \). glareola, Linn. S. N. i. p. 250 (1766).

Totanus glareola (L.), Oates, op. cit. ii. p. 401.

Rhyacophilus glareola (L.), Sharpe, Cat. Bds. Brit. Mus. xxiv. p. 491 (1896).

a. ♂. Patelung. 7th April, 1899.b, c. ♀. Tringganu. October 1899.

133. Sterna sinensis Gm.

Sterna sinensis, Gm. S. N. i. p. 608 (1788, ex Lath.); Saunders, Cat. Bds. Brit. Mus. xxv. p. 114 (1896).

a. Q. Patelung. 7th April, 1899.

134. Phoyx Manillensis Sharpe.

Phoya manillensis, Sharpe, Bull. B. O. Club, iii. p. xxxviii (1894); id. Cat. Bds. Brit. Mus. xxvi. p. 63 (1898).

Ardea purpurea, Linn., Oates, op. cit. ii. p. 245; Hartert, Journ. für Orn. 1886, p. 406.

a. Q. Tale Nowy, Patelung. 2nd April, 1899.

135. Bubulcus coromandus (Bodd.).

Cancroma coromanda, Bodd. Tabl. Pl. Enl. p. 54 (1783).

Bulbucus coromandus (Bodd.), Oates, op. cit. ii. p. 251; Hartert, Journ. für Orn. 1889, p. 406; Sharpe, Cat. Bds. Brit. Mus. xxvi. p. 217 (1898).

a, b. ♂♀. Tale Nowy, Patelung. 2nd April, 1899.

136. Podicipes Philippensis (Bonnat.).

Colymbus philippensis, Bonnat. Tabl. Encycl. Méth. i. p. 58, pl. 46. fig. 3 (1790).

Podicipes philippensis (Bonnat.), Grant, Cat. Bds. Brit. Mus.

xxvi. p. 511 (1898).

a. ♀. Patelung. 30th March, 1899.

137. Asarcornis scutulata (S. Müll.).

Anas scutulata, S. Müll. Verh. Land- en Volkenk. p. 159.

Anas leucoptera (Blyth), Oates, op. cit. ii. p. 281.

Asarcornis scutulata (S. Müll.), Salvadori, Cat. Bds. Brit. Mus. xxvii. p. 61 (1895).

a. ♀. Patelung. April 1899.

Resembles in all respects a female from the Hume Collection, but is rather more mottled on the neck. According to Mr. R. Evans, it is a migratory species in Patelung.

[24]

138. NETTOPUS COROMANDELIANUS (Gm.).

Anas coromandelianus, Gm. S. N. i. 2, p. 556 (1788).

Nettopus coromandelianus (Gm.), Oates, op. cit. ii. p. 272;
Salvad. Cat. Bds. Brit. Mus. xxvii. p. 68 (1895).

a, b. ♂♀. Patelung. 30th March, 1899.

139. DENDROCYCNA JAVANICA (Horsf.).

Anas javanica, Horsf. Tr. Linn. Soc. xiii, p. 199 (Java) (1821). Dendrocycna javanica (Horsf.), Salvad. Cat. Bds. Brit. Mus. xxvii. p. 156 (1895).

a. Q. Tale Nowy, Patelung. 2nd April, 1899.

b. Q. Tremangam. 12th July, 1899.





